

DSHS – HRSA

Division of Alcohol and Substance Abuse

HIPAA Rule 1 Data Gap Analysis

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1 Executive Summary

1.1 Overview

Since all payers must support all electronic HIPAA transactions if they correspond to any of the payer's business processes, whether manual or electronic, DASA must support the following HIPAA transactions:

837I Healthcare Claim - Institutional
837P Healthcare Claim - Professional
276/277 Claim Status Inquiry and Response
835 Remittance Advice
820 Premium Payment

The purpose of HIPAA Data Gap Analysis is to identify detailed programming/field-level issues which need remediation in order for DASA to be HIPAA compliant. The steps to accomplish this include:

1. Identify the DSHS administrations' business processes that correspond to HIPAA transactions
2. Perform data mapping (comparisons) between HIPAA transactions and legacy records
3. Identify and document the HIPAA data analysis gaps

1.2 Results

5 business processes were identified for which data mapping should be done. All of these have been mapped and the results are documented here.

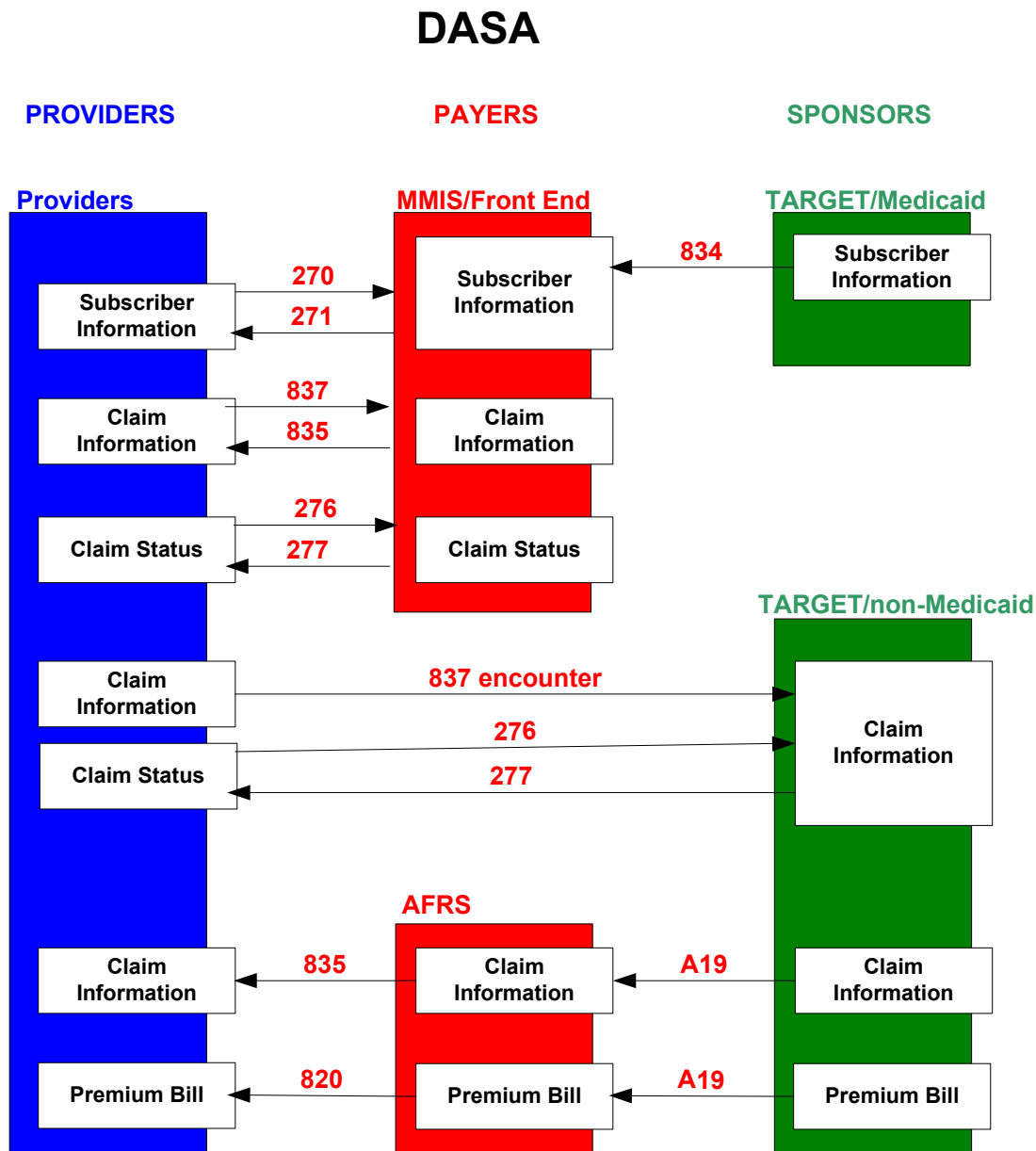
The major gaps are summarized as follows:

- Address fields should be longer to accommodate HIPAA byte lengths.
- Many AFRS screen and TARGET legacy fields have no place to be sent in HIPAA; business analysis must determine whether work-arounds are needed.
- About 20 HIPAA required fields have no matching data in the legacy systems.
- 7 fields need to have local codes converted to HIPAA standard codes.

2 Identify Transactions (Step 1)

The first step is to identify which business processes must be HIPAA compliant, by comparing the HIPAA transactions (tx) descriptions with the business processes. This was partially accomplished by the Sierra business analysts and documented in their Deliverable I, and was refined during more recent discussions between Fritz Wrede, DASA, and Francine Kitchen, HIPAA Consultant.

The following diagram shows the DASA business process which correspond to HIPAA transactions.



3 Data Mapping (Step 2)

The second step of data gap analysis is to compare the HIPAA data elements to the legacy system data elements (fields). For example, if the administration's current information system will need to support a HIPAA claim status response, then it must contain a status code for each claim, because that is a required data element in the HIPAA transaction. The goal of data mapping is to identify:

- Where each legacy field will fit in the HIPAA transaction,
- Any HIPAA required data elements that are not stored in the legacy system,
- Any legacy system data elements that have no place to be sent in the HIPAA transaction,
- Any legacy system data elements that need to be longer to support HIPAA byte lengths,

A similar analysis must be done to identify all local codes that must be converted to standard codes. That was the responsibility of the Local Codes TAG (lead by Katie Sullivan), and is beyond the scope of this data mapping project.

In order to achieve the above data mapping goals, the following tasks were completed:

1. Identify which legacy system data records (tables) contain the relevant data elements for each transaction.
2. Load the legacy record layout (fieldnames, data types, byte lengths) into the gap analysis software/tool.
3. Match all the legacy record fields to a place to be sent in the HIPAA transaction, based upon HIPAA implementation guides and discussions with legacy system data content experts.
4. Identify any HIPAA required data elements that are not stored in the legacy system.
5. Document any known special processing logic that will be needed to convert data during implementation.
6. Generate a report out of the gap analysis tool to document all of the above.

The mapping reports that were generated should be used not only for gap analysis, but also for implementation. The filenames of the DASA mapping reports are:

"HIPAA 277 to DASA mapped fields only.snp"
"HIPAA 837I to DASA mapped fields only.snp"
"HIPAA 837P to DASA mapped fields only.snp"
"HIPAA 835 to AFRSc mapped fields only.snp"

They are viewable, along with other administrations' mapping reports, from the MAA Intranet at:

<http://maaintra.dshs.wa.gov/DSHSHIPAA/mapping.asp>

4 Identify Gaps (Step 3)

This section lists all the data issues that should be addressed in order to comply with HIPAA Rule 1 for this administration, as well as is known based on discussions with administration representatives. Based on the data mapping described in the previous section, the following sections describe the data gaps discovered. In the following tables, "Transaction", "Loop", and "Segment" identify the position of the data elements within the HIPAA transactions.

4.1 Common Analysis for All Transactions

4.1.1 Legacy Fields Too Short for HIPAA

The following legacy fields are shorter than the length of the corresponding HIPAA data elements. HIPAA Rule 1 mandates that no data be truncated. So if data is received via a HIPAA transaction that is longer than the current field where it should be stored, AND that data would ever need to be sent back out in another HIPAA transaction, then the longer length must be accommodated.

Trans-action	Loop	Segment	HIPAA Data Element	HIPAA Length	Legacy Field Name	Legacy Length
837I, 837P	Billing Prov	N301	Billing Provider Street Address 1 and 2	110	Facility_Street_Address	50
837I, 837P	Billing Prov	N401	Billing Provider City	30	Facility_City	20

4.1.2 Required Data That May be Defaulted or Derived

Some data elements were determined to be required under the HIPAA guidelines that do not have a corresponding data element on the current system, but are of such a nature that they may be defaulted or derived outside of the normal business process, that is, by the implemented software (clearinghouse, translator, etc.). The mapping spreadsheet contains notes about literals and default values that should be used in these cases. No gap is involved in these cases.

4.1.3 Legacy Data No Longer Used

Many data elements are currently provided by the legacy system, but are not included in the HIPAA transaction. Thus it will no longer be possible for DASA to provide this information for this transaction. DASA must determine for each of these, whether a work-around will be needed.

There are many TARGET fields which do not have a place in the HIPAA transactions. See report "R-DASA to HIPAA". Since these claims are being done by user direct data entry (DDE), any non-HIPAA fields can be added to the DDE screens.

There are many AFRS Screen E fields which do not have a place in the HIPAA transactions. See report "R-AFRSc to HIPAA".

4.2 837I – Healthcare Claim - Institutional

4.2.1 Required Data Not Available From Legacy System

The following data elements are required under the HIPAA guidelines, but not currently available on the DASA system. These data elements must either be developed, derived or defaulted in order for the resultant transaction to be HIPAA compliant.

Loop	Segment	Data Element	Comment
Receiver, Payer	NM109, NM109	Receiver Primary Identifier, Payer Identifier	Obtain a local ID for DASA
Claim	HI02	Admitting Diagnosis	Required for Inpatients (may default to principal diagnosis)
Service	SV201	Service Line Revenue Code	Generate this based on treatment activity

4.2.2 HIPAA Code Set Usage

Beyond the format and data elements that must be used, the implementation guides for the HIPAA transaction dictate the required code sets to be utilized in certain data elements. Based upon our analysis of the current DASA business process, DASA should convert to the following standard code sets.

Loop	Segment	Data Element	Legacy Field	HIPPA Code Set
Billing Provider	NM109	Billing Provider Identifier	Facility_County_ID, Facility_Number, Provider_Number	Need a standard ID (NPI, SSN, EIN), not just the local ID
Claim	CL102	Admission Source Code	Court order flag, transfer from healthcare facility	Map local codes to HIPAA codes
Claim	CL103	Patient Status Code		Map local codes to HIPAA codes
Claim	HI01	Principal Diagnosis	substance used, relative importance, stage of use	Generate ICD9 code based on these fields

4.2.3 Looping

HIPAA transaction formats contain complex looping structures to allow repetition of sets of related data. The software that parses the incoming transaction will need to accommodate optionally:

- Many billing providers in one transaction (no upper limit),
- Many clients for each billing provider (no upper limit),
- Up to 100 claims for each client,
- Up to 999 service line items for each claim.

4.3 837P – Healthcare Claim - Professional

4.3.1 Required Data Not Available From Legacy System

The following data elements are required under the HIPAA guidelines, but not currently available on the DASA system. These data elements must either be developed, derived or defaulted in order for the resultant transaction to be HIPAA compliant.

Loop	Segment	Data Element	Comment
Receiver, Payer	NM109, NM109	Receiver Primary Identifier, Payer Identifier	Obtain a local ID for DASA

4.3.2 HIPAA Code Set Usage

Beyond the format and data elements that must be used, the implementation guides for the HIPAA transaction dictate the required code sets to be utilized in certain data elements. Based upon our analysis of the current DASA business process, DASA should convert to the following standard code sets.

Loop	Segment	Data Element	Legacy Field	HIPPA Code Set
Billing Provider	NM109	Billing Provider Identifier	Facility_County_ID, Facility_Number, Provider_Number	Need a standard ID (NPI, SSN, EIN), not just the local ID
Claim	HI01	Principal Diagnosis	substance used, relative importance, stage of use	Generate ICD9 code based on these fields
Service	SV101	Procedure Code	Generate HCPCS code based on treatment activity	

4.3.3 Looping

HIPAA transaction formats contain complex looping structures to allow repetition of sets of related data. The software that parses the incoming transaction will need to accommodate optionally:

- Many billing providers in one transaction (no upper limit),
- Many clients for each billing provider (no upper limit),
- Up to 100 claims for each client,
- Up to 50 service line items for each claim.

4.4 835 – Remittance Advice

A payer must be able to support sending electronic remittance advices. The current DASA process must be converted to a HIPAA 835 transaction. Middleware software could be used to store data elements from the incoming 837-claims transactions in order to populate the required fields in the 835-RA transaction.

4.4.1 HIPAA Required Fields with No Matching Legacy Field

Loop	Segment	HIPAA Data Element	Comment
Header	BPR04	Payment Method Code	Required; Get payment method from AFRS payment issuance report (warrant register)
Header	BPR07	Payer's Bank ID	Required if EFT
Header	BPR09	Payer's Bank Account Number	Required if EFT
Header	BPR13	Payee's DFI Bank ID	Required if EFT
Header	BPR15	Payee's bank account number	Required if EFT
Header	BPR16	Check Issue or EFT Effective Date	Required; Get warrant date from AFRS warrant register response
Header	TRN02	Check or EFT Trace Number	Required; Get warrant # from AFRS warrant register response

4.4.2 Match Back

This data must be stored from the incoming request (837-claim) and returned in the response (835-RA).

Loop	Segment	HIPAA Data Element	Comment
Header	REF02	Receiver ID	
Header	N104	Payee ID Code	
Claim	CLP01	Patient Control Number	Provider's ID for client
Claim	NM1	Patient Name (Last, First) and ID	
Service	SVC01-2	Procedure Code and modifiers	HCPCS Code

4.4.3 HIPAA Code Set Usage

Beyond the format and data elements that must be used, the implementation guides for the HIPAA transaction dictate the required code sets to be utilized in certain data elements. Based upon our analysis of the current DASA business process, there are no currently used fields that need to convert to standard code sets. Use of HIPAA code sets are in new fields to be created and in fields to be stored and returned from the request.

4.5 276/277 – Claim Status Request/Response

All of the data elements (not counting hard coded literals) contained in 276-Claim Status Request are also contained in 277-Claim Status Response. Therefore, for the sake of time, only the 277 was mapped.

4.5.1 Required Data Not Available From Legacy System

The following data elements are required under the HIPAA guidelines, but not currently available on the DASA system. These data elements must either be developed, derived or defaulted in order for the resultant transaction to be HIPAA compliant.

Loop	Segment	Data Element	Comment
Info. Source	NM109	Payer Identifier	Obtain a local ID for DASA
Claim	STC01-1	Healthcare Claim Status Category Code	Generate a standard code for claim status category
Claim	STC01-2	Healthcare Claim Status Code	Generate a standard code for claim status
Claim	STC04	Total Claim Charge Amount	Keep history of amount charged
Claim	STC05	Claim Payment Amount	Keep history of amount paid
Claim	STC09	Check or EFT Trace Number	Required if paid; keep history
Service	SVC03	Line Item Provider Payment Amount	Required if supporting service level status
Service	STC01-1	Healthcare Claim Status Category Code	Required if supporting service level status
Service	STC01-2	Healthcare Claim Status Code	Required if supporting service level status

Since new capability must be added to keep a history of claims paid or rejected, it will also be helpful to include the following optional data elements: Adjudication Date, Check Issue or EFT Effective Date.

4.5.2 Store Data From Request

The following data used in the 277 Response should be stored and returned from the 276 Request. These are cases where entire segments should be stored and returned.

Loop	Segment	Data Element	Comment
Info Receiver	NM1	Information Receiver Name and ID	Required
Service Provider	NM1	Service Provider Name and ID	Required
Claim	TRN	Claim Submitter Trace Number	Required
Claim	REF	Institutional Bill Type Identifier	Required for institutional claims
Claim	DTP	Claim Service Date	Required
Service	SVC	Service Line Information	Required if supporting service level status
Service	REF	Service Line Item Identification	Required if sent in 837
Service	DTP	Service Line Date	Required if sent in 837

4.5.3 HIPAA Code Set Usage

Beyond the format and data elements that must be used, the implementation guides for the HIPAA transaction dictate the required code sets to be utilized in certain data elements. Based upon our analysis of the current DASA business process, there are no currently used fields that need to convert to standard code sets. Use of HIPAA code sets are in new fields to be created and in fields to be stored and returned from the request.

4.5.4 Looping

HIPAA transaction formats contain complex looping structures to allow repetition of sets of related data. The software that parses the incoming transaction will need to accommodate optionally:

- Multiple information sources (payers) in one transaction,
- Multiple information receivers for each information source,
- Multiple service providers for each information receiver,
- Multiple clients for each service provider,
- Multiple claims for each client,
- Multiple service line items for each claim.